

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/711,124	LINK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	John H. Le	2863	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/14/2005.
2. ☒ The allowed claim(s) is/are 1-6 and 8-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

***Response to Amendment***

1. Applicant's amendment filed 11/14/2005 has been entered and carefully considered.

Claims 1 and 12 have been amended.

Claim 7 has been cancelled.

***Reasons for Allowance***

2. Claims 1-6 and 8-21 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, none of the prior art of record teaches or suggests the combination of a method for analyzing waviness of a surface, wherein the method comprising: processing data gathered with the surface profiling instrument to produce a set of data points indicative of a waviness profile; selecting a subset of the set of data points; determining a peak value and a valley value of the subset; calculating a waviness height of the subset based on the peak and valley values; repeating the selecting, determining, and calculating steps for additional subsets until all members of the set of data points have been selected; and selecting a maximum waviness height value from the waviness heights calculated for each subset, wherein each subset includes a predetermined number of consecutive data points. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 9, none of the prior art of record teaches or suggests the combination of a method for analyzing waviness of a machined surface, the method comprising: obtaining a data set having a plurality of sequential data points indicative of a waviness profile of the machined surface; establishing a size of a data processing window representing a predetermined number of sequential data points; positioning the data processing window to include a first data point in the data set; selecting a subset of the data set; determining a peak value and a valley value of the subset; calculating a peak-to-valley waviness height based on the difference between the peak and valley values; indexing the data processing window to select another subset having at least one different member than a previous subset. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 13, none of the prior art of record teaches or suggests the combination of a method for analyzing waviness of a surface, the method comprising: measuring a height of the surface with a surface profiling instrument to obtain data over a predetermined distance; fitting a regression line to the data; subtracting the regression line from the data over the predetermined distance; filtering the data to determine a waviness profile having a set of data points; selecting a subset of the set of data points that includes a predetermined number of consecutive data points; determining a peak value and a valley value of the subset; calculating a peak-to-valley height of the subset based on a difference between the peak and valley values; selecting a maximum waviness height value from the peak-to-valley heights calculated for each subset;

comparing the maximum height waviness value to a threshold value indicative of a localized waviness region; and rejecting the part if the maximum waviness height value exceeds the threshold value. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Le whose telephone number is 571 272 2275. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571 272 2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Application/Control Number: 10/711,124

Page 5

Art Unit: 2863

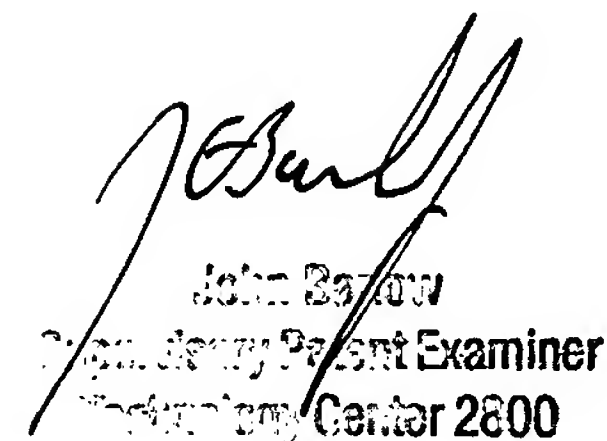
have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John H. Le

Patent Examiner-Group 2863

November 21, 2005



John Baylow  
Senior Patent Examiner  
Electronic Business Center 2800